

24. (Thrice amended) A method of detecting a disease or a disease susceptibility trait in an organism, wherein said disease or said disease susceptibility trait is associated with a germline mutation in one of two or more subject genes, and wherein said germline mutation is selected from the group consisting of mutations that cause an about 50% decrease in the level of wild-type protein normally expressed by a subject gene:

(a) isolating a biological sample from said organism;

(b) immunologically quantitating the amount of wild-type protein in said sample, that is expressed by each of the subject genes;

(c) calculating the ratio of the amount of the wild-type protein expressed by one of said subject genes in said sample, to the amount of wild-type protein expressed by the other subject gene in said sample, or to each of the amounts of wild-type protein expressed by each of the other subject genes in said sample;

(d) determining whether the ratio or ratios calculated in step (c) reflects or reflect an abnormally low level of a wild-type protein expressed by either of the subject genes, or by any of the subject genes in said sample; and

(e) concluding that if the ratio or ratios calculated in step (c) indicates or indicate that there is an abnormally low level of a wild-type protein expressed by one of the subject

genes in said sample, that that subject gene contains a germline mutation in one of its alleles, and that the subject organism is affected by the disease or the disease susceptibility trait associated with said germline mutation.

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*Di*  
Please add new Claim 61.

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*B*  
61. (New) The method of Claim 24 wherein said mutation is selected from the group consisting of truncation-causing mutations and mutations that cause allelic loss.

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REMARKS

As required by 37 CFR 1.121(c)(3), enclosed herewith as Appendix 1 is a clean set of all the claims now pending.

Claim 24 has been amended to point out with more particularity and clarity the subject matter regarded by the Applicant as his invention. Claim 24 has been corrected by replacing the phrase "truncating-causing mutations and mutations that cause allelic loss" with "mutations that cause an about 50% decrease in the level of wild-type protein normally expressed by a subject gene." The instant application repeatedly points out that the immunoassays of this invention "are used to measure a reduction from normal in the amount of full-length protein expressed by a subject gene." [Subject application, page 2, lines 27-29.] The application states at page 5, lines 24-29: